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A)	PPLICATION NO.	FII	LING DATE		FIRST NAM	ED INVENTOR		ATTORNEY DOCKET N	O. CONFIRMATION NO.
	10/672,865	. 0	9/26/2003	•	Eric R	. Bradford		01-7116	1275
	32681	7590	05/24/2004				:	EX	KAMINER
	PLANTRO	NICS, IN	C.					MAYO	III, WILLIAM H
	345 ENCIN	•	T				1 1	ART UNIT	PAPER NUMBER
	P.O. BOX 6	35						ARTUNII	PAFER NUMBER
	SANTA CR	UZ, CA	95060-0635					2831	

DATE MAILED: 05/24/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

	Applicati n N .	Applicant(s)	<u> </u>
	10/672,865	BRADFORD, ER	IC R.
Office Action Summary	Examiner	Art Unit	
	William H. Mayo III	2831	Ky.
The MAILING DATE of this communication a			ddress
Period for Reply			
A SHORTENED STATUTORY PERIOD FOR REP THE MAILING DATE OF THIS COMMUNICATION - Extensions of time may be available under the provisions of 37 CFR 1 after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a re - If NO period for reply is specified above, the maximum statutory perior - Failure to reply within the set or extended period for reply will, by statu Any reply received by the Office later than three months after the maili earned patent term adjustment. See 37 CFR 1.704(b).	.136(a). In no event, however, may a reply be ply within the statutory minimum of thirty (30) d d will apply and will expire SIX (6) MONTHS fro tte, cause the application to become ABANDON	timely filed ays will be considered time on the mailing date of this of NED (35 U.S.C. § 133).	ely. communication.
Status			
1) Responsive to communication(s) filed on			
the contract of the contract o	is action is non-final.		
3) Since this application is in condition for allow		rosecution as to the	e merits is
closed in accordance with the practice under	· ·		
Disposition of Claims			
4)⊠ Claim(s) <u>1-17</u> is/are pending in the application			
4a) Of the above claim(s) is/are withdra	awn from consideration.		
5) Claim(s) is/are allowed.			
6)⊠ Claim(s) <u>1-17</u> is/are rejected.			
7) Claim(s) is/are objected to.			
8) Claim(s) are subject to restriction and/	or election requirement.		
Application Papers			
9)☐ The specification is objected to by the Examin	ier.		
10)⊠ The drawing(s) filed on 15 January 2004 is/ard		ed to by the Examin	ier.
Applicant may not request that any objection to the			
Replacement drawing sheet(s) including the corre			FR 1.121(d).
11)☐ The oath or declaration is objected to by the E	xaminer. Note the attached Offic	e Action or form P	ГО-152.
Priority under 35 U.S.C. § 119			
12) ☐ Acknowledgment is made of a claim for foreiga) ☐ All b) ☐ Some * c) ☐ None of:	n priority under 35 U.S.C. § 119(a)-(d) or (f).	
1. ☐ Certified copies of the priority documen	ate have been received		
2. Certified copies of the priority documen		tion No	
3. ☐ Copies of the certified copies of the prior			Stane
application from the International Burea			Otage
* See the attached detailed Office action for a lis		ved.	
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Attachment(s)			•
1) Notice of References Cited (PTO-892)	4) Interview Summar		
 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08 	Paper No(s)/Mail [5) Notice of Informal		Դ_152\
Paper No(s)/Mail Date	6) Other:	raterit Application (PTC	J=152) ∴

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DETAILED ACTION

Drawings

- 1. The drawings are objected to because Figures 3-4 lack the proper cross-hatching which indicates the type of materials, which may be in an invention. Specifically, the cross hatching to indicate the conductor and insulation materials is improper. The applicant should refer to MPEP Section 608.02 for the proper cross-hatching of materials. Correction is required.
- 2. Applicant is required to submit a proposed drawing correction in reply to this Office action. However, formal correction of the noted defect may be deferred until after the examiner has considered the proposed drawing correction. Failure to timely submit the proposed drawing correction will result in the abandonment of the application.

Claim Rejections - 35 USC § 112

- 3. The following is a quotation of the second paragraph of 35 U.S.C. 112:
 - The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
- 4. Claims 4 & 13 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
- 5. Claim 4 recites the limitation "the insulation material" in line 1, which is confusing and renders the claim indefinite. It is unclear whether the applicant is referring to the previous mentioned "first strip shaped insulation materials" or "the second groove

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shaped insulation" or if the applicant is introducing a new insulation material. If the applicant is referring to the previous mentioned terms, then he/she should recite the term with consistency. If the applicant is referring to a new insulation material, then he/she should make the term more distinguishable.

6. Claim 13 recites the limitation "the insulation material" in line 1, which is confusing and renders the claim indefinite. It is unclear whether the applicant is referring to the previous mentioned "first strip shaped insulation materials" or "the second groove shaped insulation" or if the applicant is introducing a new insulation material. If the applicant is referring to the previous mentioned terms, then he/she should recite the term with consistency. If the applicant is referring to a new insulation material, then he/she should make the term more distinguishable.

Claim Rejections - 35 USC § 102

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 8. Claims 1-3, 5, 10-12, and 14-17 are rejected under 35 U.S.C. 102(b) as being anticipated by DeFlorio (Pat Num 5,949,026). DeFlorio discloses an electrical cable system (Figs 1-4) prevents intertangling of the individual cables and provides a means for combining the cables as one combined entity (Col 1, lines 54-59). Specifically, with respect to claim 1, DeFlorio discloses an electrical cable system (Fig 1) comprising a

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first electrical cable (left 10) comprising a strip shaped insulation material (14); at least one electrical conductor (12) disposed within the strip shaped insulation material (14); a second electrical cable (right 10) comprising a groove shaped (i.e. hook and loop) insulation material (13) for receiving the strip shaped insulation material (14); at least one electrical conductor (11) disposed within the groove shaped insulation material (13), wherein the first electrical cable (left 10) and second electrical cable (right 10) may be releasably joined to form a co-joined cable by mating the strip shaped insulation material (14) with the groove shaped insulation material (13, Col 2, lines 35-44). With respect to claim 2, DeFlorio discloses the cable system (Fig 1) further comprising an actuator (i.e. zipper not numbered), wherein the actuator (zipper) comprises a first end (bottom of zipper) defining a single aperture (where joined cables left and right 10) exit through which the first electrical cable (left 10) and second electrical cable (right 10) pass through; and a second end (top of zipper) defining a first and second aperture (left and right holes in which the cables left and right 10 enter) separated by a divider (separator at point of zipper), wherein the first electrical cable (left 10) passes through the first aperture (left side) and the second electrical cable (right 10) passes through the second aperture (right side), and wherein the actuator (zipper) is capable of bidirectional movement (up and down movement) along the cable system (Figs 1-2), and wherein movement of the actuator (zipper) in a first direction (upward) joins the first electrical cable (left 10) and second electrical cable (right 10, Fig 1) and movement of the actuator (zipper) in a second direction (downward) releases the first electrical cable (left 10) from the second electrical cable (right 10, Fig 2). With respect to claim 3,

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DeFlorio discloses that the first electrical cable (left 10) and second electrical cable (right 10) are joined using a releasable press-and-fit seal (i.e. hook and loop seal, Col 2, lines 39-54). With respect to claim 5, DeFlorio discloses that the strip shaped insulation material (14) further comprises a protruding edge (i.e. hook) for interlocking with the groove shaped insulation material (13, ie loop). With respect to claim 10, DeFlorio discloses an electrical cable system (Fig 1) comprising a first electrical cable (left 10) comprising a first strip shaped insulation material (14); at least one electrical conductor (12) disposed within the first strip shaped insulation material (14) comprising a first groove shaped insulation material (i.e. loop of 14, Col 2, lines 39-54); a second electrical cable (right 10) comprising a second strip shaped insulation material (13) for inserting into the first groove shaped insulation material (loop of 14) and comprising a second groove shaped insulation material (loop of 13) for receiving the first strip shaped insulation materials (hook of 14) and at least one electrical conductor (11) disposed within the second strip shaped insulation material (13), wherein the first electrical cable (left 10) and second electrical cable (right 10) may be releasably joined to form a cojoined cable by mating the strip shaped insulation material (14) with the second groove shaped insulation material (loop of 13) and mating the second strip shaped insulation material (13) with the first groove shaped insulation material (loop of 14, Col 2, lines 35-44). With respect to claim 11, DeFlorio discloses the cable system (Fig 1) further comprising an actuator (i.e. zipper not numbered), wherein the actuator (zipper) comprises a first end (bottom of zipper) defining a single aperture (where joined cables left and right 10) exit through which the first electrical cable (left 10) and second

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electrical cable (right 10) pass through; and a second end (top of zipper) defining a first and second aperture (left and right holes in which the cables left and right 10 enter) separated by a divider (separator at point of zipper), wherein the first electrical cable (left 10) passes through the first aperture (left side) and the second electrical cable (right 10) passes through the second aperture (right side), and wherein the actuator (zipper) is capable of bi-directional movement (up and down movement) along the cable system (Figs 1-2), and wherein movement of the actuator (zipper) in a first direction (upward) joins the first electrical cable (left 10) and second electrical cable (right 10, Fig 1) and movement of the actuator (zipper) in a second direction (downward) releases the first electrical cable (left 10) from the second electrical cable (right 10, Fig 2). With respect to claim 12, DeFlorio discloses that the first electrical cable (left 10) and second electrical cable (right 10) are joined using a releasable press-and-fit seal (i.e. hook and loop seal, Col 2, lines 39-54). With respect to claim 14, DeFlorio discloses that the strip shaped insulation material (14) further comprises a protruding edge (i.e. hook) for interlocking with the groove shaped insulation material (13, i.e. loop). With respect to claim 15, DeFlorio discloses an electrical cable system (Fig 1) comprising a first electrical cable (left 10) comprising at least one electrical conductor (12) disposed within the first insulation material (14); a second electrical cable (right 10) comprising at least one electrical conductor (11) disposed within a second insulation material (13), and a means (zipper) for releasably joining the first electrical cable (left 10) with the second electrical cable (right 10) to form a co-joined cable (combined 10 as shown at the bottom of Figure 1). With respect to claim 16, DeFlorio discloses a method for

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managing an electrical cable (Col 1, lines 54-59) comprising providing a first electrical cable (left 10) having as strip shaped insulation (14) with at least one electrical conductor (12) disposed within the strip shaped insulation material (14), providing a second electrical cable (right 10) having a groove shaped insulation material (loop of 13) for receiving the strip shaped insulation material (14), wherein at least one electrical conductor (11) is disposed within the groove shaped insulation (loop of 13) and mating the strip shaped insulation material (14) with the groove shaped insulation material (13) to releasably join the first electrical cable (left 10) with the second electrical cable (right 10, Col 2, lines 39-54). With respect to claim 17, DeFlorio disclose a method comprising providing an actuator (i.e. zipper not numbered) comprising a first end (bottom of zipper) and a second end (top of zipper), wherein the first end (bottom of the zipper) defines a single aperture (where joined cables left and right 10 exit through) which the first electrical cable (left 10) and second electrical cable (right 10) pass through; and the second end (top of zipper) defines a first and second aperture (left and right holes in which the cables left and right 10 enter) separated by a divider (separator at point of zipper), wherein the first electrical cable (left 10) passes through the first aperture (left side) and the second electrical cable (right 10) passes through the second aperture (right side), and moving the actuator (zipper) in a first direction (upward) to join the first electrical cable (left 10) and second electrical cable (right 10, Fig 1) and moving the actuator (zipper) in a second direction (downward) releases the first electrical cable (left 10) from the second electrical cable (right 10, Fig 2).

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Claims 1, 4, 10, and 13 are rejected under 35 U.S.C. 102(b) as being anticipated by Basconi (Pat Num 4,847,443). Basconi discloses an electrical cable system (Figs 4-6) having a plurality of the individual cables having interlocking grooves and projections for maintaining consistent electrical characteristics in its individual conductors (abstract). Specifically, with respect to claim 1, Basconi discloses an electrical cable system (Fig 4) comprising a first electrical cable (21) comprising a strip shaped insulation material (top 31); at least one electrical conductor (27) disposed within the strip shaped insulation material (top 31); a second electrical cable (23) comprising a groove shaped (33') insulation material (middle 31) for receiving the strip shaped insulation material (top 31) at projection (35); at least one electrical conductor (27) disposed within the groove (33') shaped insulation material (middle 31), wherein the first electrical cable (21) and second electrical cable (23) may be releasably joined to form a co-joined cable (Fig 1) by mating the strip shaped insulation material (top 31) with the groove shaped insulation material (middle 31, Col 3, lines 1-31). With respect to claim 4, Basconi discloses that the first and second insulation materials (top and middle 31) may be made of PVC (Col 3, lines 6-9). With respect to claim 10, Basconi discloses an electrical cable system (Fig. 4-6) comprising a first electrical cable (21) comprising a first strip shaped insulation material (top 31); at least one electrical conductor (27) disposed within the first strip shaped insulation material (top 31) comprising a first groove shaped insulation material (33, Col 2, lines 39-54); a second electrical cable (23) comprising a second strip shaped insulation material (middle 31) for inserting into the first groove shaped insulation material (33 of top 31) and comprising a second groove shaped insulation material (33')

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for receiving the first strip shaped insulation materials (35 of top 31) and at least one electrical conductor (27) disposed within the second strip shaped insulation material (middle 31), wherein the first electrical cable (21) and second electrical cable (23) may be releasably joined to form a co-joined cable by mating the strip shaped insulation material (top 31 at 35) with the second groove shaped insulation material (middle 31 at 33') and mating the second strip shaped insulation material (middle 31) with the first groove shaped insulation material (top 31 at 33, Col 3, lines 1-21). With respect to claim 13, Basconi discloses that the first and second insulation materials (top and middle 31) may be made of PVC (Col 3, lines 6-9).

Claim Rejections - 35 USC § 103

- 10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 6-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over MacDonald, Jr et al (Pat Num 3,374,126, herein referred to as MacDonald) in view of DeFlorio (Pat Num 5,949,026). MacDonald discloses a headset (Fig 4) including a slider which is sliably attached to both the first and second cords, wherein the downwardly motion along the first and second cords allows the cords to separate (Col 2, lines 63-67). Specifically, with respect to claim 6, MacDonald discloses a headset (10) comprising a first speaker (18) coupled to a first electrical cable (32), a second speaker

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(21) coupled to a second electrical cable (34). With respect to claim 7, MacDonald discloses that the headset (10) further comprises a microphone (19) for receiving a voice audio signal (Col 4, lines 38-41). With respect to claim 9, MacDonald discloses that the electrical cable assembly (Fig 4) further comprises an actuator (30), wherein the actuator (30) comprises a first end (top of 30) defining a double aperture (30a & 30b) through which the first electrical cable (32) and second electrical cable (34) pass through; and a second end (bottom of 30) defining a first and second aperture (30a & 30b) separated by a divider (separator at point of 30), wherein the first electrical cable (32) passes through the first aperture (30b) and the second electrical cable (34) passes through the second aperture (30a), and wherein the actuator (30) is capable of bidirectional movement (up and down movement) along the cable system (Fig 4, Col 4, lines 64-67), and wherein movement of the actuator (30) in a second direction (downward) releases the first electrical cable (32) from the second electrical cable (34, Col 5, lines 1-8).

However, MacDonald doesn't necessarily disclose the first cable discloses an electrical cable system comprising a first electrical cable comprising an electrical conductor disposed within a first insulation material; whereby the first electrical cable is shaped to form a first component of a releasable press and fit seal and a second electrical cable comprising a second electrical conductor disposed within the second insulation material, wherein the second insulation material is shaped to form a second component of the releasable press and fit seal to form a co-joined cable by mating the strip shaped insulation material with the groove shaped insulation material (claim 6), nor

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the first insulation material being a strip shaped and the second insulation material being a groove shaped, wherein the first electrical cable and second electrical cable may be releasably joined to form a co-joined cable by inserting the first insulation material into the second insulation material (claim 8), nor the actuator comprising a first end defining a single aperture through which the first electrical cable and second electrical cable pass through; and wherein movement of the actuator in a first direction joins the first electrical cable (left 10) and second electrical cable (claim 9).

DeFlorio teaches an electrical cable system (Figs 1-4) prevents intertangling of the individual cables and provides a means for combining the cables as one combined entity (Col 1, lines 54-59). Specifically, with respect to claim 6, DeFlorio teaches an electrical cable system (Fig 1) comprising a first electrical cable (left 10) comprising an electrical conductor (12) disposed within a first insulation material (14); whereby the first electrical cable (left 10) is shaped to form a first component of a releasable press and fit seal (i.e. hook and loop, Col 2, lines 29-44), and a second electrical cable (right 10) comprising a second electrical conductor (11) disposed within the second insulation material (13), wherein the second insulation material (13) is shaped to form a second component of the releasable press and fit seal (hook and loop, Col 2, lines 29-44) to form a co-joined cable by mating the strip shaped insulation material (14) with the groove shaped insulation material (13, Col 2, lines 35-44). With respect to claim 8, DeFlorio teaches that the first insulation material (14) is strip shaped and the second insulation material (13) is groove shaped, wherein the first electrical cable (21) and second electrical cable (23) may be releasably joined to form a co-joined cable by

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inserting the first insulation material (top 31 at 35) into the second insulation material (middle 31 at 33'). With respect to claim 9, DeFlorio teaches that the electrical cable assembly (Fig 1) further comprises an actuator (i.e. zipper not numbered), wherein the actuator (zipper) comprises a first end (bottom of zipper) defining a single aperture (where joined cables left and right 10) exit through which the first electrical cable (left 10) and second electrical cable (right 10) pass through; and a second end (top of zipper) defining a first and second aperture (left and right holes in which the cables left and right 10 enter) separated by a divider (separator at point of zipper), wherein the first electrical cable (left 10) passes through the first aperture (left side) and the second electrical cable (right 10) passes through the second aperture (right side), and wherein the actuator (zipper) is capable of bi-directional movement (up and down movement) along the cable system (Figs 1-2), and wherein movement of the actuator (zipper) in a first direction (upward) joins the first electrical cable (left 10) and second electrical cable (right 10, Fig 1) and movement of the actuator (zipper) in a second direction (downward) releases the first electrical cable (left 10) from the second electrical cable (right 10, Fig 2).

With respect to claims 6 & 8-9, it would have been obvious to one having ordinary skill in the art of cables at the time the invention was made to modify the cables and actuator of MacDonald to comprise the cable configuration as taught by DeFlorio because DeFlorio teaches that such a configuration prevents intertangling of the individual cables and provides a means for combining the cables as one combined entity (Col 1, lines 54-59).

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Conclusion

11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. They are Stachura (Pat Num 2,585,054), Emmel (Pat Num 4,230,898), Yamazaki (JP Pat Num 48-63266), Ueno (Pat Num 6,538,205), Tsuna (JP Pat Num 05-062527), Journes et al (FR Pat Num 2545973), and Raabe (Pat Num 2,528,667), all of which discloses plurality of cables being connected by various means

Communication

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to William H. Mayo III whose telephone number is (571)-272-1978. The examiner can normally be reached on M-F 8:30am-6:00 pm (alternate Fridays off).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dean Reichard can be reached on (571) 272-2800 ext 31. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

WHM III May 11, 2004 William H. Mayo III Primary Examiner Art Unit 2831